AMENDMENTS TO THE SPECIFICATION:

Please add the following new paragraphs after line 18 of page 4 of the specification:

Figure 4 is a schematic representation of a sensor according to an embodiment of the present invention.

Figure 5 is a schematic representation of a sensor array according to an embodiment of the present invention.

Please replace the paragraphs beginning on page 4, line 21 and ending on page 6, line 3 with the following:

The present invention relates to several embodiments of sensors using one or more types of modified particles which will be further described below. In the first embodiment, as shown schematically in Figure 4, the present invention relates to one or more sensors for detecting an analyte in a fluid. The sensor 10 is electrically connected to an electrical measuring apparatus 12. The sensor has a layer 14 which contains conductive modified particles. Thus, with the sensor containing conductive modified particles, an electrical path or pathway is formed. In other words, the layer containing the conductive modified particles is located between first and second electrodes 16, 18, respectively to form, essentially an electrical circuit which has a certain resistance as measured by the electrical measuring apparatus. The sensor having the certain preexisting resistance is altered upon the sensor being subjected to an analyte which causes the resistance to be altered due to the presence of the analyte. These changes in resistance can be correlated to the concentration of the analyte detected and/or can be used to create odor signatures which can then be compared with previously recorded and/or stored response

signatures. Upon comparing the odor signature of the analyte detected with previously recorded and/or stored response signatures, a match can be made with a library of odor signatures previously recorded in order to determine the concentration and/or identification of the analyte. In this embodiment, the presence of a nonconducting material as in previous sensors is not necessary and preferably is not used. The sensor containing the layer of conductive modified particles is sufficient for the sensor to sense the analyte and determine its concentration and/or odor signature. Thus, the sensor in this embodiment is simpler in design and more economical to manufacture. In addition, the sensor in this embodiment is easier to produce from the stand point that only a dispersion of modified particles needs to be applied onto a substrate, for instance, in order to form a sensor for purposes of the present invention. The layer containing the conductive modified particles can optionally contain other conducting materials as well as nonconducting materials. Examples of other conducting materials and/or nonconducting materials are described below. In addition, the modified particles are described in significant detail below as well. The description that follows with regard to the modified particles can be used in any of the embodiments described in the present invention.

An array of sensors can also be used in this embodiment for detecting an analyte in the fluid, as shown schematically in Figure 5. At least one of the sensors 10 contains a layer having the conductive modified particles. The other sensors, shown as an additional sensors 110 can also use the same design, in other words, also contain a layer of conductive modified particles or can use sensors having conventional designs, for instance, like the ones described in U.S. Patent Nos. 5,571,401 and 5,788,833 which are both incorporated in their entirety by reference herein. Typically, the amount of conductive modified particles which are used to form a layer for the sensor of the present invention is an amount sufficient to form an electrical pathway between the

two electrodes forming a part of the sensor. For purposes of the present invention, an amount above this amount can also be used if desired.